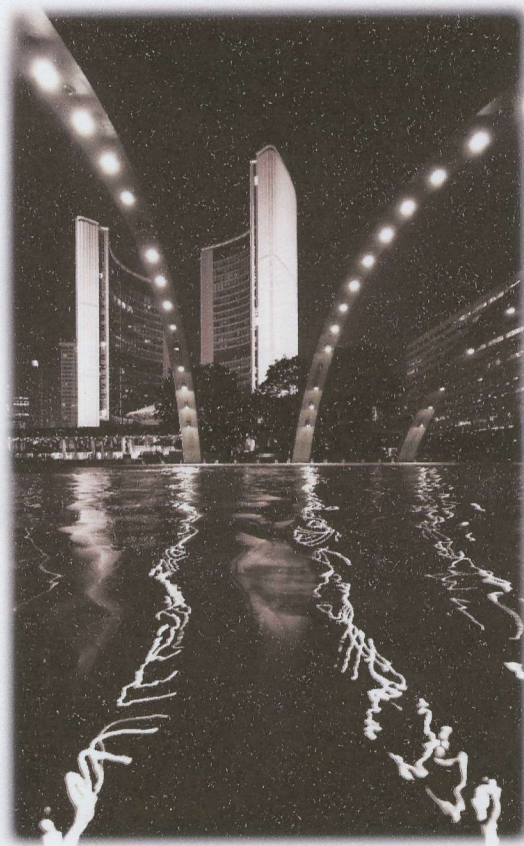


POLYGON CITY



BY: JOE THORNBURGH & ANDY PIERCE



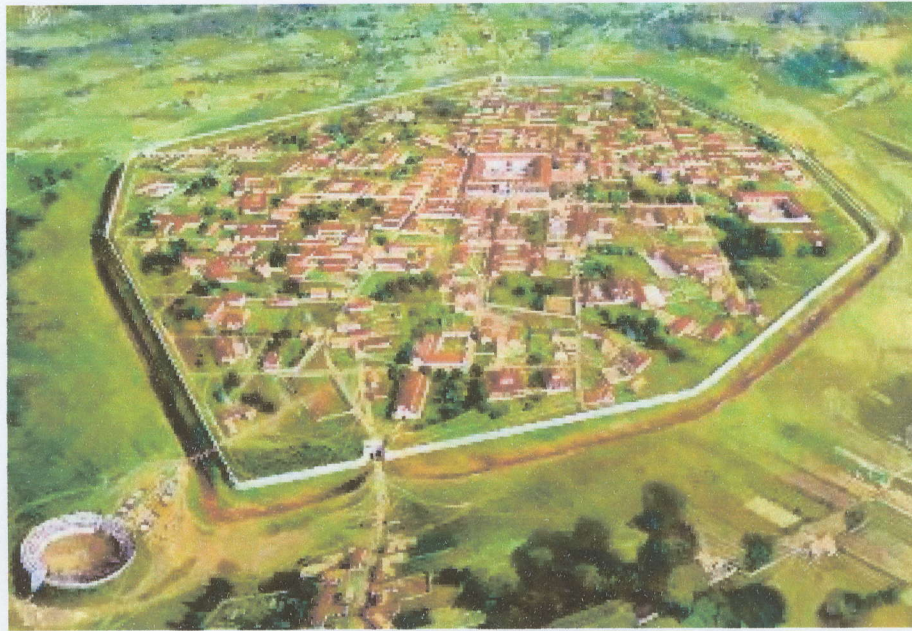
THERE ONCE WAS A CIRCLE NAMED SAM. CIRCLES ARE SHAPES THAT HAVE A CENTRE AND POINTS ON THE SAME PLANE THAT ARE ALL AN EQUAL DISTANCE AWAY FROM THAT CENTER. SAM LIVED OUT IN THE COUNTRY SIDE ALL BY HIMSELF. SAM HAD BEEN ALONE FOR A VERY LONG TIME AND WAS BECOMING SICK OF IT. A FEW YEARS BACK A WANDERING SHAPE HAD STOPPED BY AND TOLD HIM OF THE WONDEROUS "POLYGON CITY". IN THE CITY, THERE ARE ALL SORTS OF INTERESTING SHAPES EVERYWHERE!



POLYGONS ARE CLOSED FIGURES THAT HAVE STRAIGHT LINES. SAM HAD NEVER SEEN A POLYGON BEFORE. SO ONE DAY WHEN HE WAS PARTICULARLY BORED HE DECIDED THAT HE WOULD GO SEE THIS AMAZING CITY AND ITS RESIDENTS FOR HIMSELF. QUICKLY, SAM PACKED HIS THINGS IN A SACK AND SET OUT DOWN THE DUSTY ROAD.



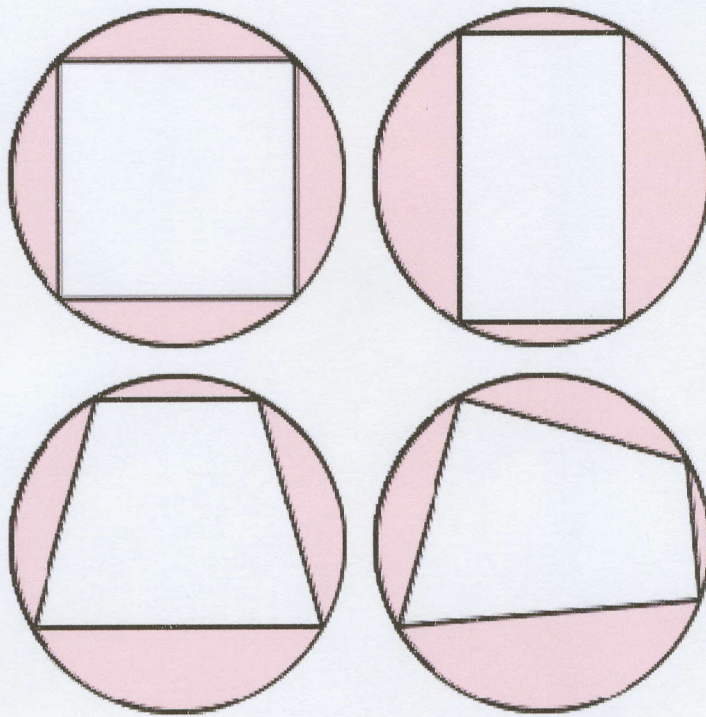
AFTER MANY DAYS OF TRAVEL, SAM FINALLY ARRIVED AT A SMALL BRIDGE. AT THE FOOT OF THE BRIDGE SAW ONE OF THE POLYGONS THAT HE HAD HEARD OF. IT WAS A THREE SIDED POLYGON. THE BRIDGE KEEPER NOTICED HIM AND SAID "HALT THIS IS THE BRIDGE TO POLYGON CITY. I AM TRIANGLE ITS GUARD, WHAT BUSINESS DO YOU HAVE HERE?" SLIGHTLY TAKEN ABACK SAM ANSWERED, "I'M HERE ON... VACATION." "OH, SURE YOU CAN GO THROUGH, YOU SHOULD ARRIVE AT YOUR DESTINATION SOON" SAID THE TRIANGLE. WHAT AN ODD SHAPE THOUGHT SAM AS HE WALKED ACROSS THE BRIDGE.



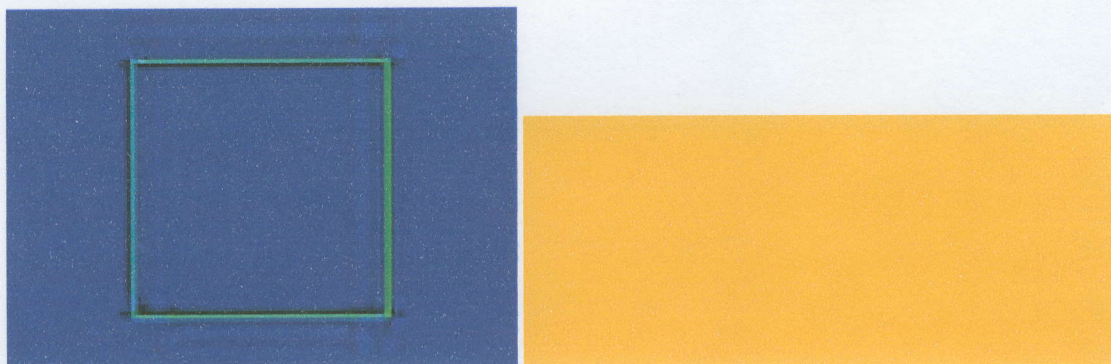
AFTER ANOTHER LONG DAY OF TRAVEL, SAM COULD GLIMPSE THE GREAT CITY. IT HAD GREAT TALL WHITE WALLS ALL AROUND IT THAT WERE ALL PERFECTLY CONGRUENT. CONGRUENT MEANS THAT THEY WERE ALL THE SAME SHAPE AND SIZE. THE SUN WAS SETTING SO SAM DECIDED TO MAKE CAMP AND VIEW THE CITY IN ALL OF ITS WONDER IN THE MORNING.



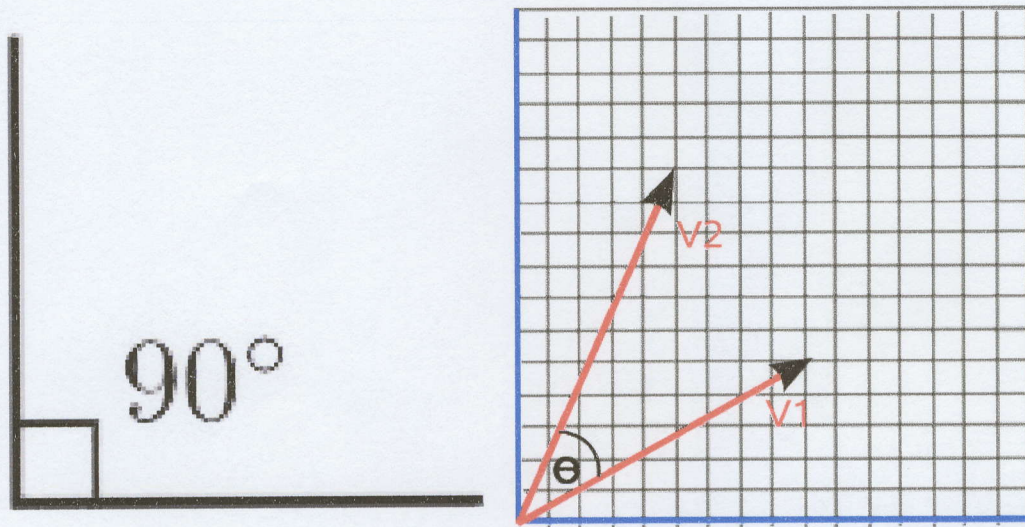
**SAM ROSE WITH THE SUN. SAM FELT ALL
SORTS OF JUMBLED UP FEELINGS NOW THAT
HE FINALLY WAS REACHING THIS AMAZING
PLACE, BUT DECIDED THAT HE HAD TO DO IT.
THE GATES WERE WIDE OPEN AND SAM
STEPPED THROUGH INTO THIS NEW WORLD.**



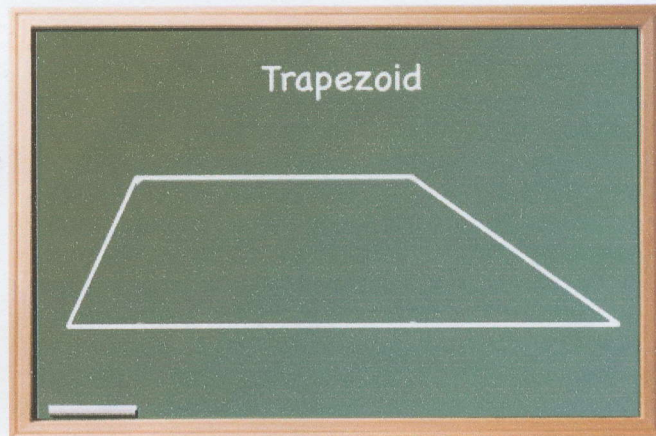
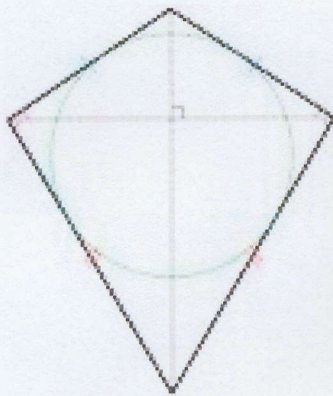
**SAM SAW AN INFORMATION BOOTH AND
STARTED LEARNING SO MUCH ABOUT THE
SHAPES AROUND HIM. LIKE HOW THE
MAJORITY OF THE SHAPES HERE WERE
QUADRILATERALS OR FOUR SIDED POLYGONS.**



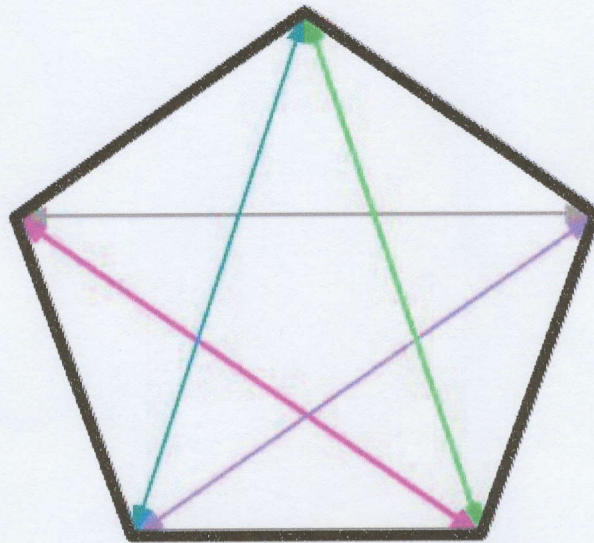
THERE WERE ALSO MANY SUB TYPES OF QUADRILATERALS, LIKE SQUARES, A POLYGON WITH FOUR EQUAL SIDES. RECTANGLES, A FOUR SIDED WITH FOUR RIGHT ANGLES. SAM HAD NEVER HEARD OF ANGLES BEFORE EITHER SO HE WANTED TO KNOW ABOUT THOSE TOO.



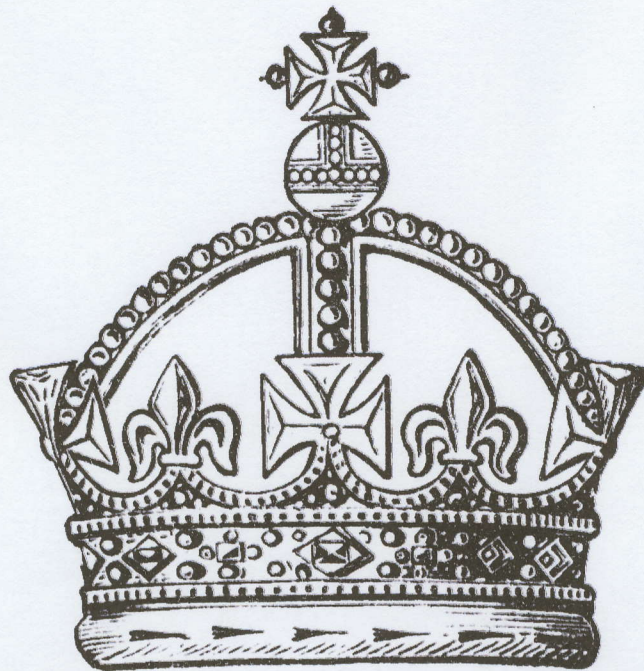
ANGLES ARE THE AMOUNT OF ROTATION THAT SEPARATE RAYS THAT MEET IN A CORNER OF A POLYGON. RIGHT ANGLES ARE ANGLES THAT HAVE NINETY DEGREES. SAM THOUGHT THIS MORE INTERESTING BECAUSE HE ONLY HAD ONE ANGLE.



THE CLERK WENT ON TO SAY THAT THERE WERE ALSO TRAPEZOIDS WHICH WERE FOUR SIDED POLYGONS THAT HAD ONE PAIR OF PARALLEL SIDES. THEN THERE WERE KITES WHICH WERE FOUR SIDED POLYGONS THAT HAD TWO PAIRS OF CONGRUENT SIDES.



WHILE SAM THOUGHT ABOUT ALL OF THIS AND REALIZED THAT SOME POLYGONS WERE TECHNICALLY OTHER POLYGONS. THE CLERK SAID "YES SOME ARE THE SAME TYPE BY DEFINITION, BUT THEY WON'T LIKE IT UNLESS YOU CALL THEM THE MOST SPECIFIC ONE." "OH YEAH ONE MORE THING THE KING HERE IS A PENTAGON, A FIVE SIDED POLYGON, YOU SHOULD GO SEE HIM, WE DON'T GET MANY CIRCLES PASSING THROUGH HERE." "OK THANKS," SAID SAM.



SAM DECIDED HE WOULD GO SEE THE KING. HE SPOTTED A SIGN THAT GAVE DIRECTIONS TO THE CASTLE AND WENT THAT WAY. THE CASTLE WAS HUGE; IT SEEMED LIKE A FEW MANSIONS COMBINED TOGETHER. SAM MET THE KING AND THEY TALKED AND HAD A GOOD TIME. THE KING ASKED SAM IF HE HAD ANY PLANS. SAM SAID NO. SO THE KING GRACIOUSLY OFFERED HIM A JOB AS HIS CIRCULAR ADVISOR. SAM ACCEPTED OVERJOYED AND LIVED IN ANGLE CITY HAPPILY EVER AFTER.

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